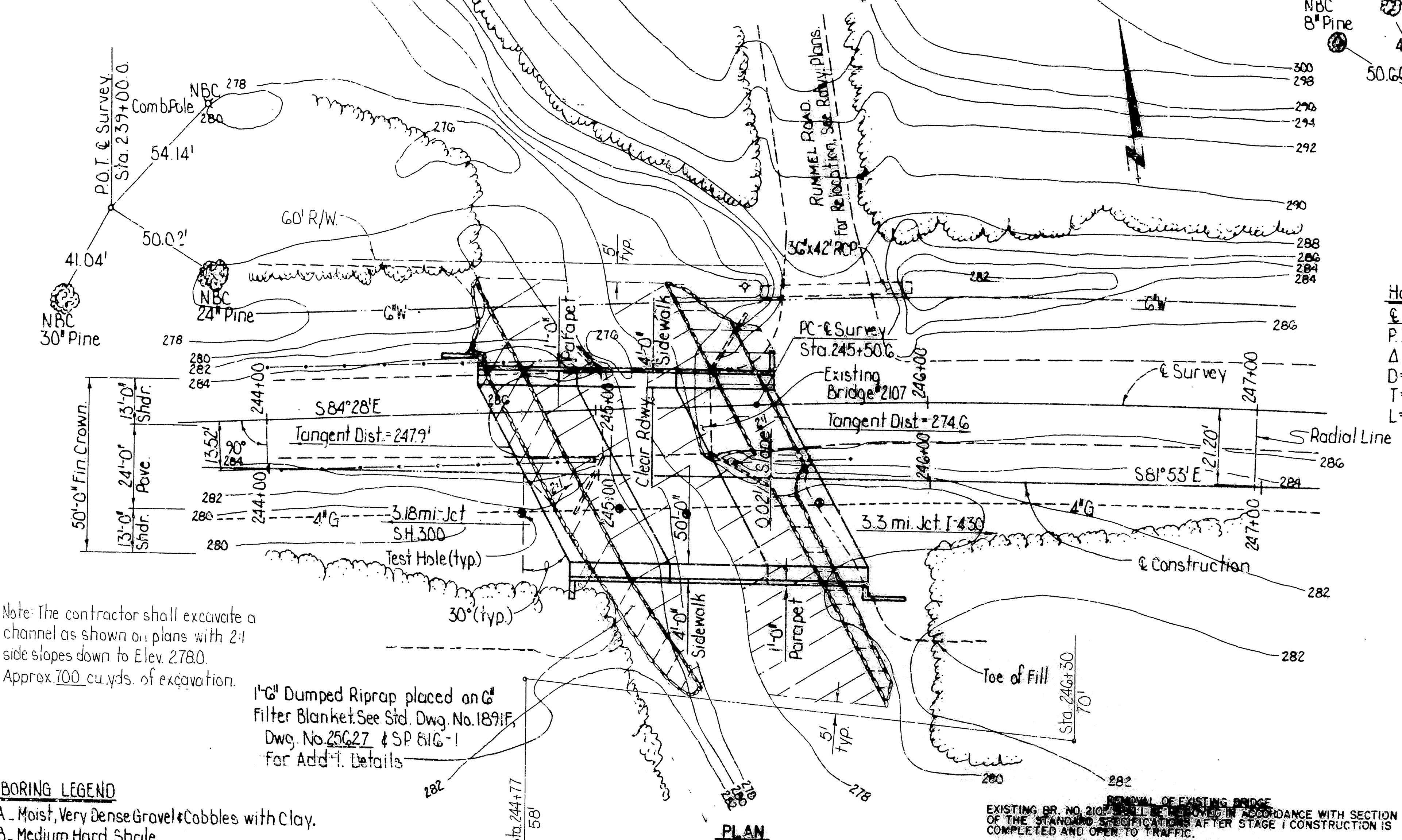


For R/W Data, See Rdwy. Plans.

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		13	53
JOB NO. 50161				
5996 - LAYOUT - 25626				



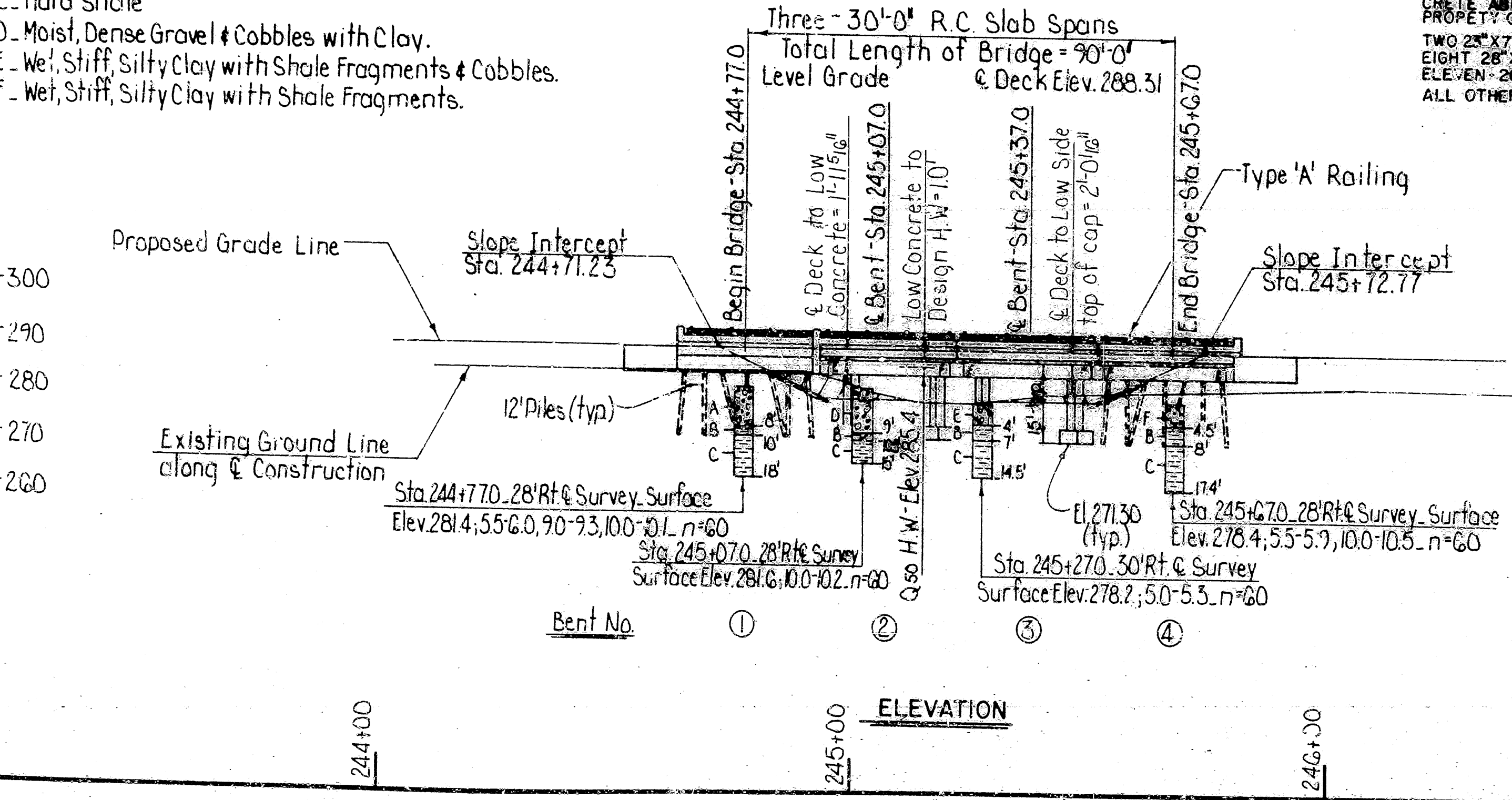
Note: The contractor shall excavate a channel as shown on plans with 2:1 side slopes down to Elev. 278.0. Approx. 700 cu. yds. of excavation.

1'-6" Dumped Riprap placed on 6" Filter Blanket. See Std. Dwg. No. 1891F, Dwg. No. 25627, & SP 616-1 for Add'l. Details.

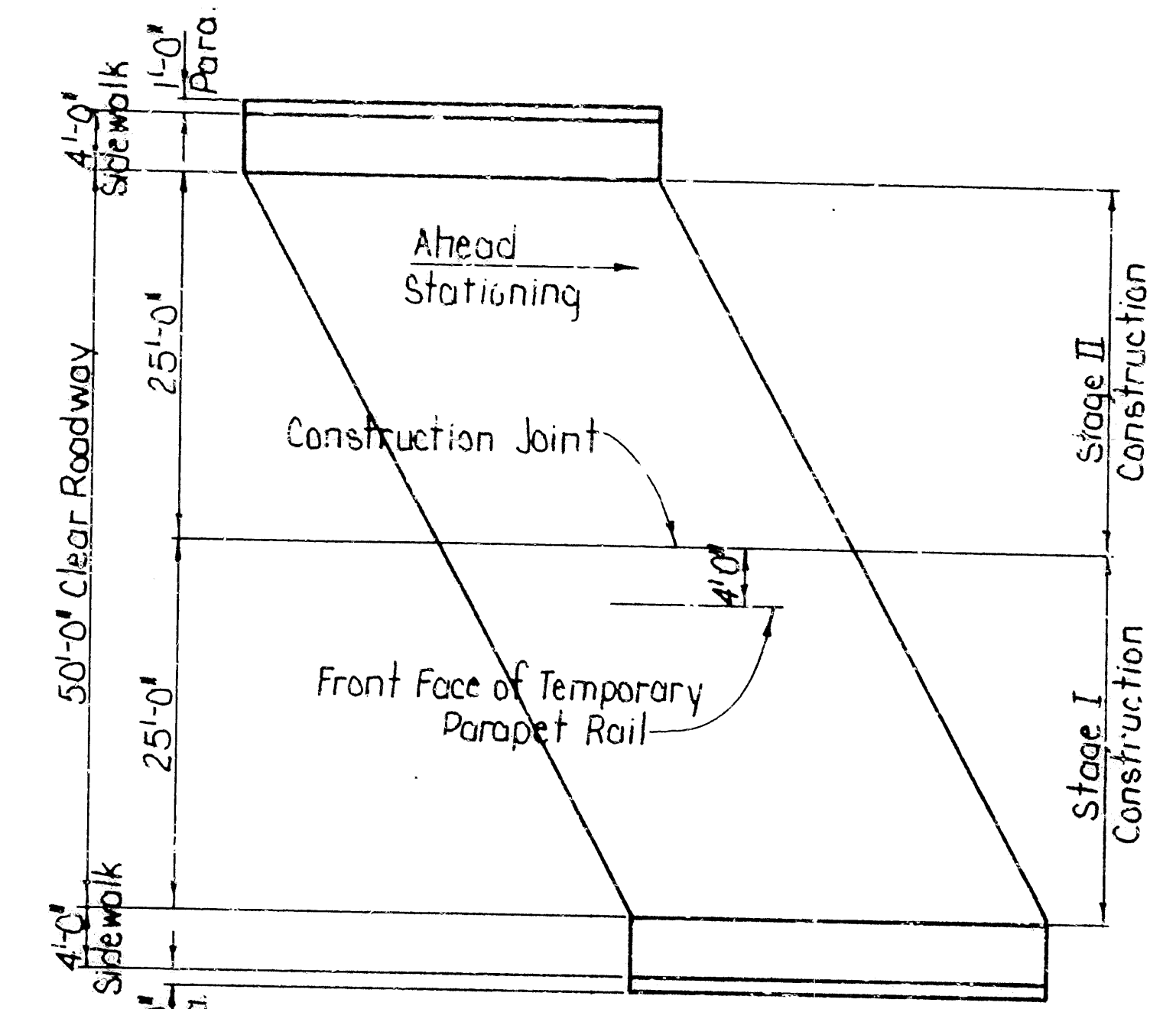
**BORING LEGEND**

- A. Moist, Very Dense Gravel & Cobbles with Clay.
- B. Medium Hard Shale.
- C. Hard Shale
- D. Moist, Dense Gravel & Cobbles with Clay.
- E. Wet, Stiff, Silty Clay with Shale Fragments & Cobbles.
- F. Wet, Stiff, Silty Clay with Shale Fragments.

EXISTING BR. NO. 2107 IS 24' X 33' AND CONSISTS OF A W-BEAM SPAN ON CONCRETE ABUTMENTS. THE FOLLOWING MATERIAL SHALL REMAIN THE PROPERTY OF THE STATE:  
TWO 23' X 7' X 30" I-BEAMS  
EIGHT 28' X 6' X 38" I-BEAMS  
ELEVEN 26' GUARD RAIL SECTIONS  
ALL OTHER MATERIAL SHALL BECOME PROPERTY OF CONTRACTOR.



**Horizontal Curve Data**  
& Survey  
P.I. Sta. 246+97.0  
 $\Delta = 8^\circ 46' \text{ Rt.}$   
 $D = 3^\circ$   
 $T = 146.4'$   
 $L = 292.2'$



**STAGE CONSTRUCTION DETAIL**

**GENERAL NOTES**

- BENCH MARK:** COTTON PICKER SPIRE IN COMB. POLE 39' LT. CENTERLINE STA. 247+28.0, ELEV. 288.78.
- DESIGN SPECIFICATIONS:** AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 EDITION WITH CURRENT INTERIMS.
- CONSTRUCTION SPECIFICATIONS:** ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.
- LIVE LOADING:** HS20-44
- METHOD OF DESIGN:** LOAD FACTOR
- ALL CONCRETE IN THE SUBSTRUCTURE SHALL BE CLASS S. ALL CONCRETE IN THE SUPERSTRUCTURE TO BE CLASS S(AE). CLASS S AND CLASS S(AE) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH  $f_c = 3500 \text{ PSI}$ . ALL EXPOSED CORNERS TO BE CHAMFERED  $3/4"$  UNLESS OTHERWISE NOTED. ALL CONCRETE TO BE POURED IN THE DRY.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR ASTM A617, GRADE 60.
- TOP OF FOOTINGS SHALL HAVE A MINIMUM COVER OF 1'-0". FOOTINGS SHALL BE SET A MINIMUM OF 1'-0" INTO MATERIAL DESIGNATED AS ROCK (MED. HARD SHALE) ON THE BORING LOGS. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 OF THE STANDARD SPECIFICATIONS.
- FOUNDATION PRESSURES: MAXIMUM CALCULATED = 9.88 KSF (GROUP 1)
- ALL PILING SHALL BE HPI0X42 AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE AND INTO THE MATERIAL DESIGNATED AS SHALE ON THE BORING LOGS. LENGTHS OF PILING SHOWN ARE FOR ESTIMATING QUANTITIES ONLY. ORDER LENGTHS SHOWN, CUT-OFF OR BUILD-UP, IF NECESSARY, TO BE PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.
- THE ROADWAY SURFACE OF THE BRIDGE SHALL BE GIVEN A FINE FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.23 FOR CLASS 6, ROADWAY SURFACE FINISH.
- FOR DETAILS OF END BENTS, SEE DWG. NOS. 25628 & 25629
- FOR DETAILS OF INT. BENTS, SEE DWG. NO. 25630
- FOR DETAILS OF SPANS, SEE DWG. NO. 25631

HYDRAULIC DATA	
	Discharge cfs
Design Flood (Q <sub>50</sub> )	3,519
Base Flood (Q <sub>100</sub> )	3,710
	Backwater Elevation
Design Flood (Q <sub>50</sub> )	285.4
Base Flood (Q <sub>100</sub> )	285.6

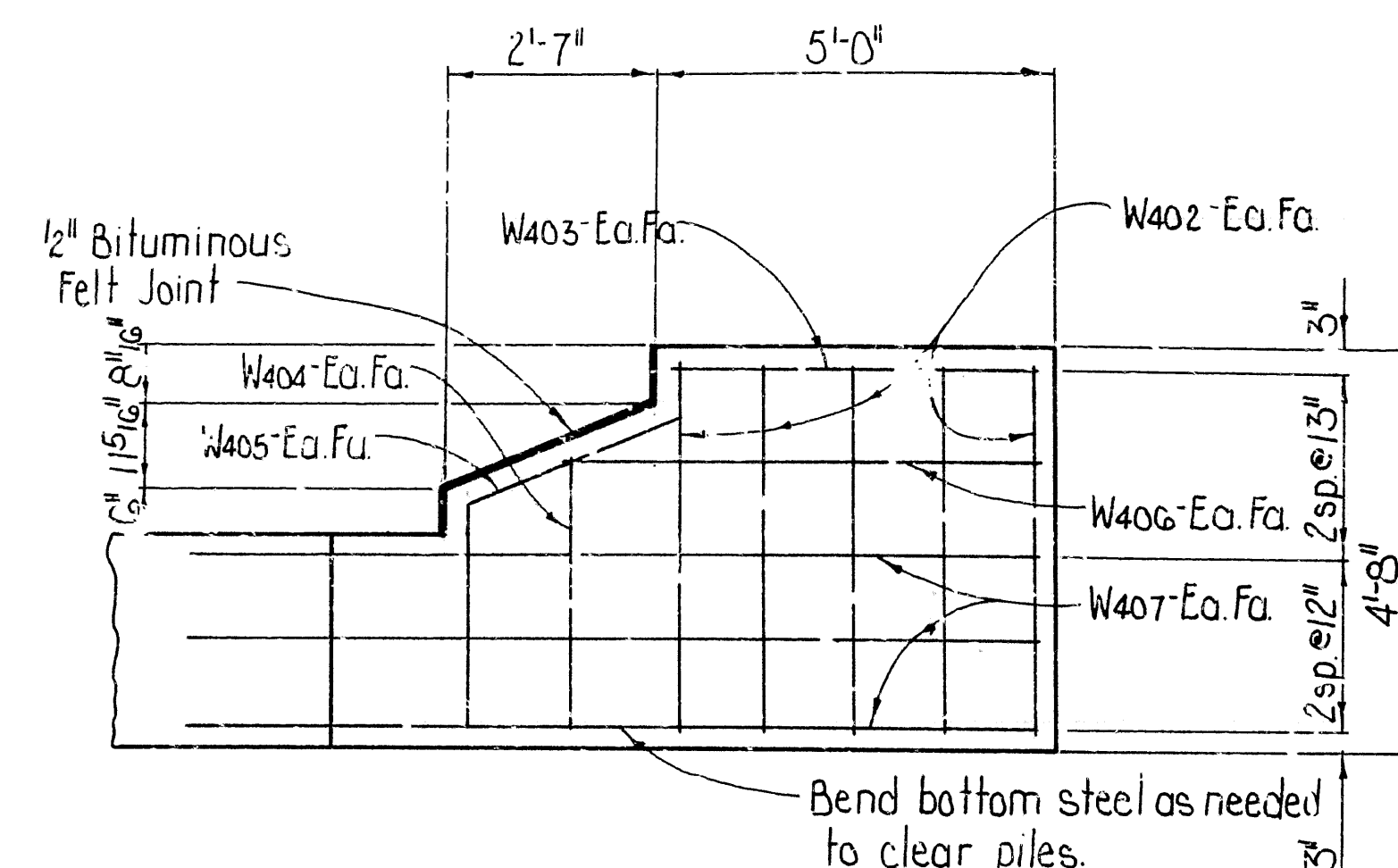
Drainage Area = 3.7 sq. mi.

LAYOUT OF BRIDGE OVER  
NORTH CHANNEL TAYLOR LOOP CREEK  
HWY. 10 BRIDGES (WEST L.R.)  
PULASKI COUNTY  
ROUTE 10 SEC. 8  
ARKANSAS STATE HIGHWAY COMMISSION

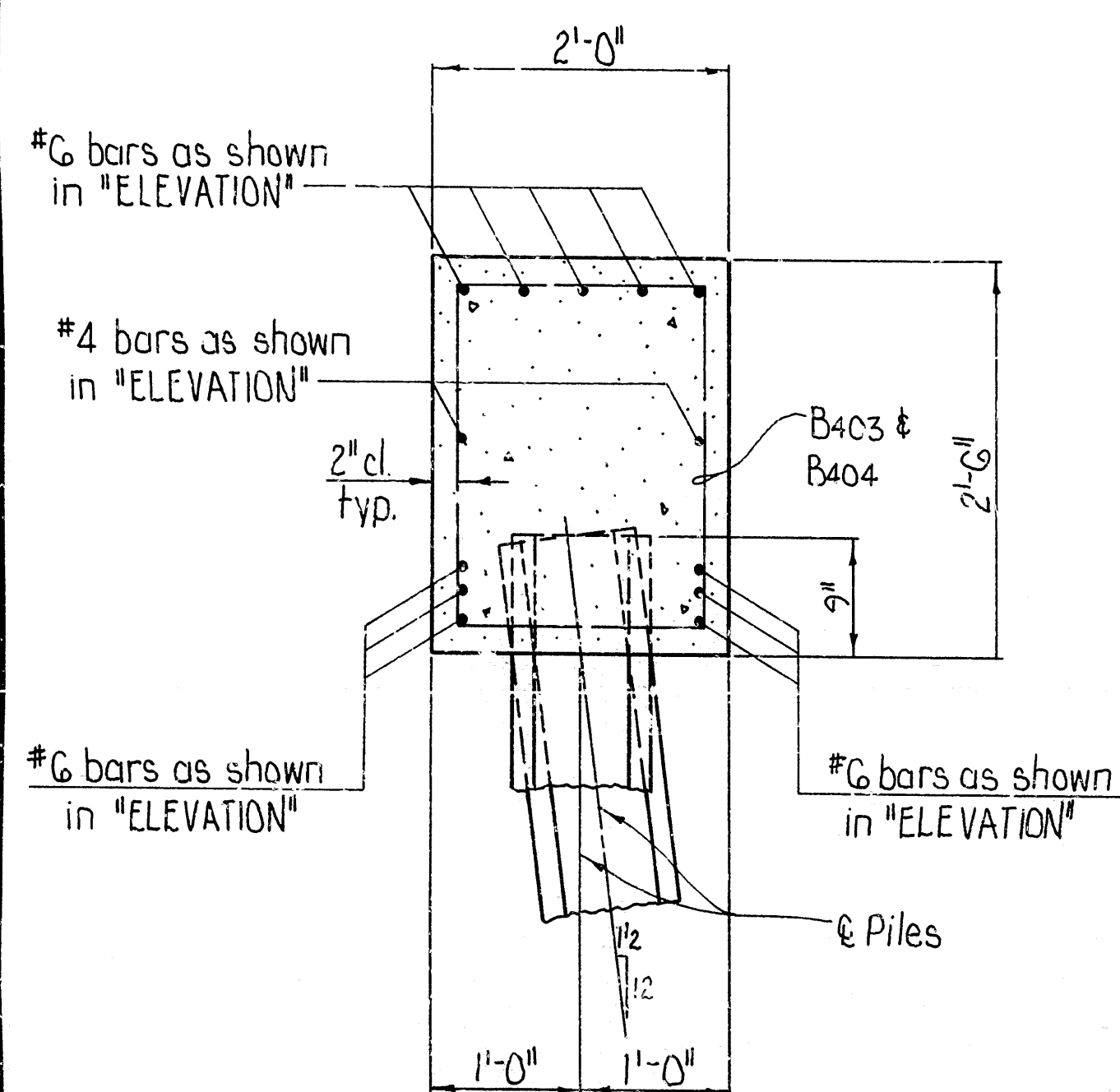
LITTLE ROCK, ARK.  
DRAWN BY: KSH DATE: 27 AUG 82  
CHECKED BY: JJA DATE: SEPT 82  
DESIGNED BY: JJA DATE:   
BRIDGE NO. 5996 DRAWING NO. 25626



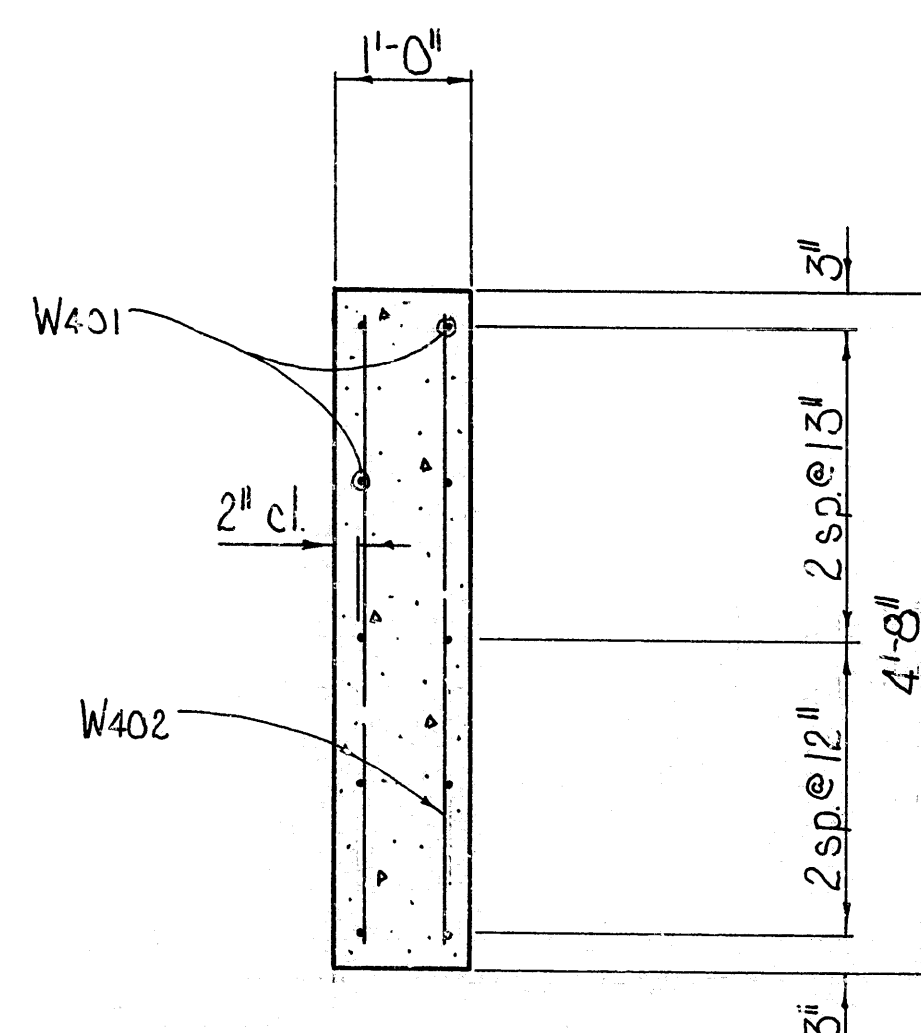




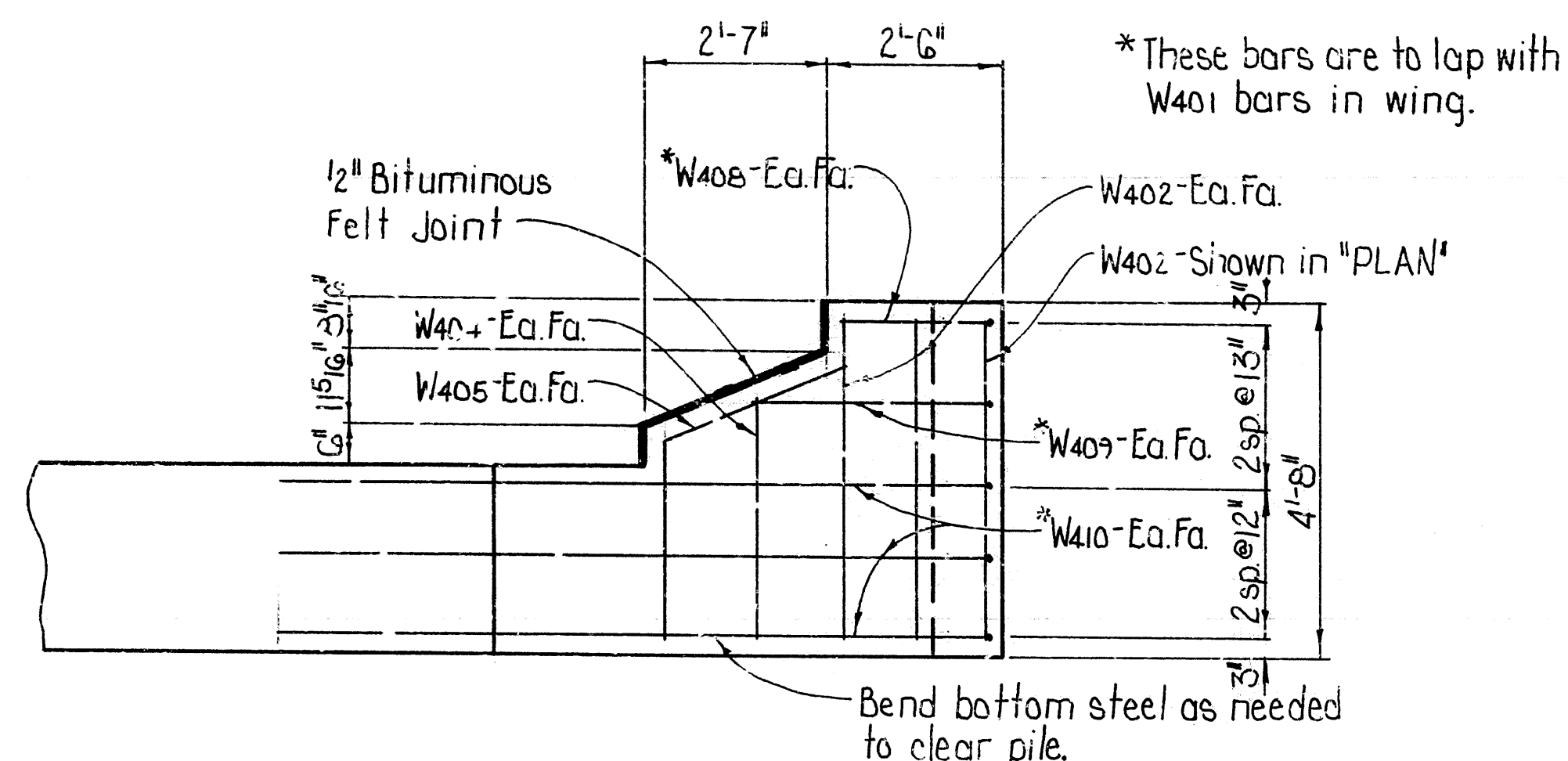
VIEW A-A  
Scale: 1/2"=1'-0"



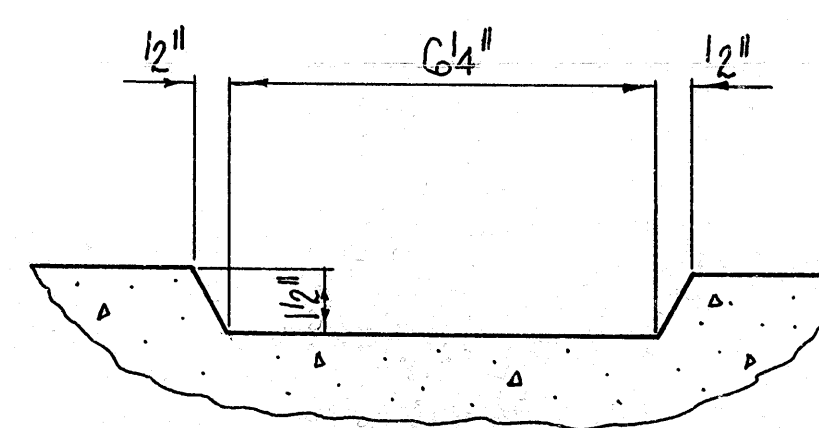
SECTION C-C  
Scale: 1/4"=1'-0"



SECTION THRU WING  
Scale: 3/4"=1'-0"



VIEW B-B  
Scale: 1/2"=1'-0"



KEYWAY DETAIL  
No Scale

#### GENERAL NOTES

ALL CONCRETE TO BE CLASS "S" AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

ALL PILING SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 44 TONS PER SHALL BE HP STEEL SIZED AS SHOWN.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

LIVE LOAD: HS20-44

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 WITH CURRENT INTERIMS.

METHOD OF DESIGN: LOAD FACTOR

CONCRETE: ALL CONCRETE SHALL BE CLASS "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH  $f'_c = 3500$  PSI.

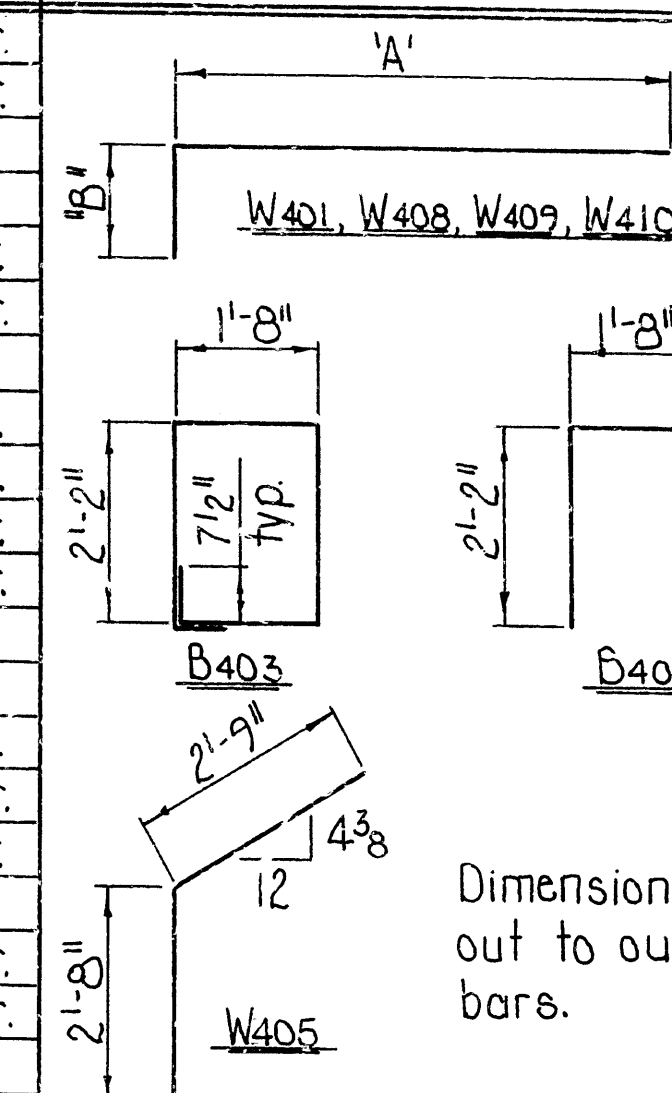
REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A617, GRADE 60, (YIELD STRENGTH = 60,000 PSI).

DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	60161		16	53

#### BAR LIST - PER BENT

MARK	NUMBER REQUIRED	LENGTH	'A'	'B'	PIN DIA.
BENT 1	BENT 4				
B401	2	37'-5"			Str.
B402	2	30'-0"			Str.
B403	80	8'-6"	See Diagram	2"	
B404	14	5'-7"	See Diagram	2"	
B405	2	31'-5"			Str.
B406	2	36'-0"			Str.
B601	11	38'-9"			Str.
B602	11	30'-0"			Str.
B603	11	31'-5"			Str.
B604	11	37'-4"			Str.
W401	10	11'-7"	10'-8"	12"	2"
W402	34	4'-4"			Str.
W403	2	4'-8"			Str.
W404	4	3'-3"			Str.
W405	4	5'-4"	See Diagram	2"	
W406	2	6'-1"			Str.
W407	6	10'-7"			Str.
W408	2	3'-9"	2'-2"	1'-8"	2"
W409	2	5'-2"	3'-7"	1'-8"	2"
W410	6	10'-3"	8'-8"	1'-8"	2"

#### BENDING DIAGRAMS

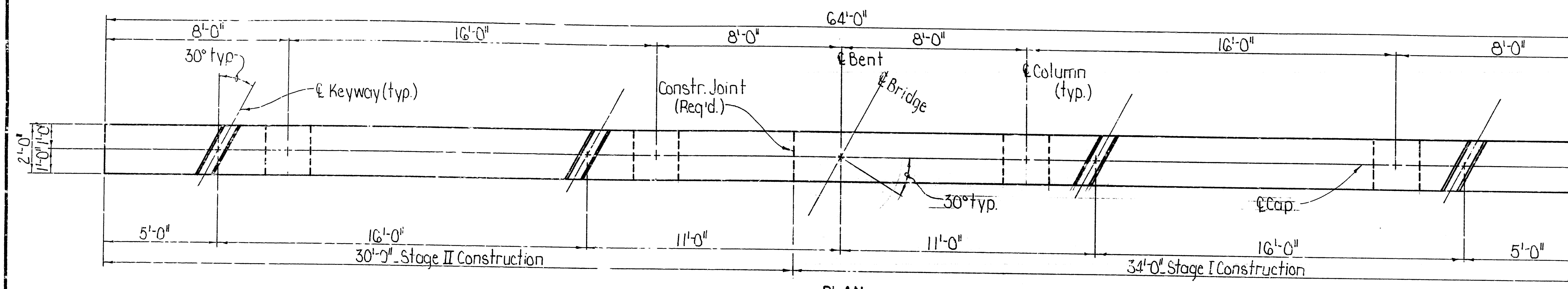


Dimensions are out to out of bars.

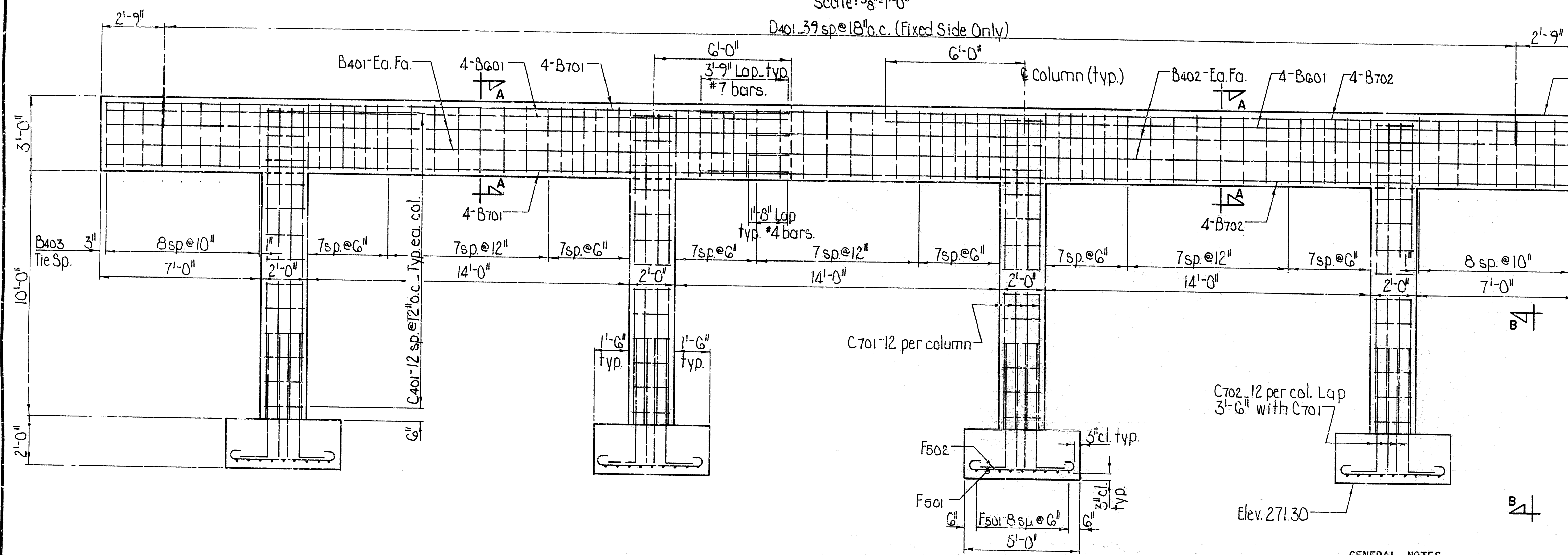
SHEET 2 OF 2  
DETAILS OF END BENTS  
BRIDGE OVER NORTH CHANNEL  
TAYLOR LOOP CREEK  
PULASKI COUNTY  
ROUTE 10 SEC. 8  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: KDH DATE: 14 OCT 82  
CHECKED BY: KMG DATE: 1-24-83 SCALE: AS NOTED  
DESIGNED BY: LJA DATE: -  
BRIDGE NO. 5996 DRAWING NO. 25629



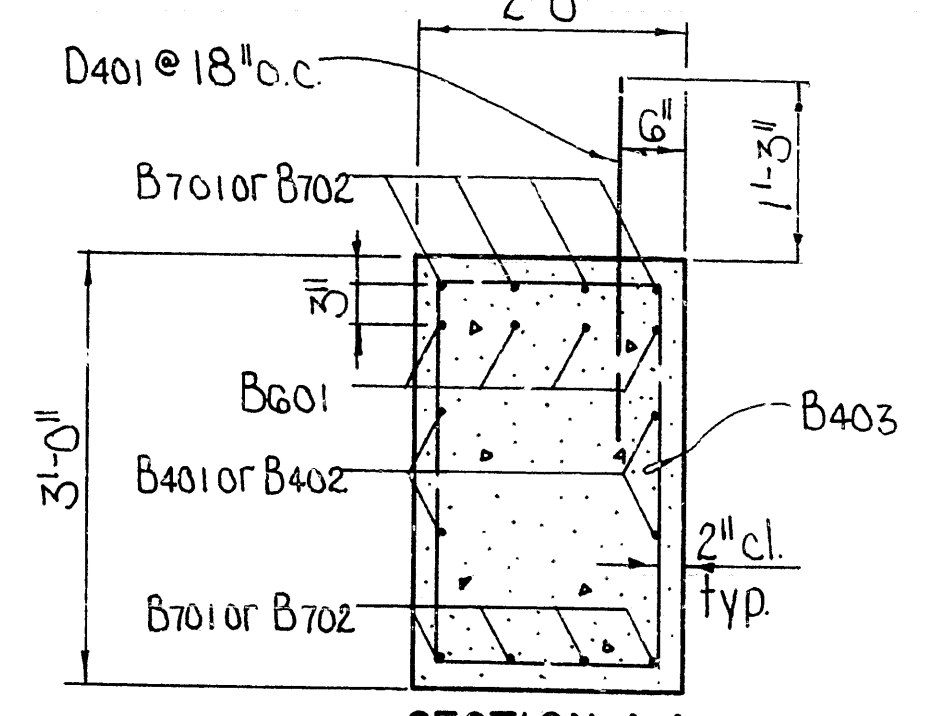
DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		17	53
				JOB NO. 60161		5996 -INT. BTS. 2 & 3-25630		



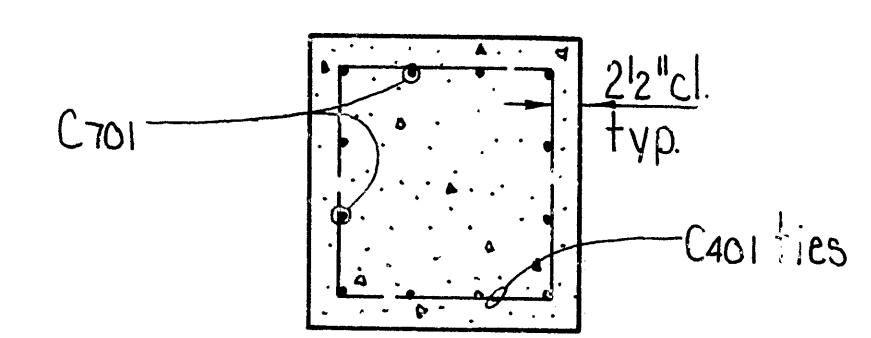
**PLAN**  
Scale: 3/8"=1'-0"



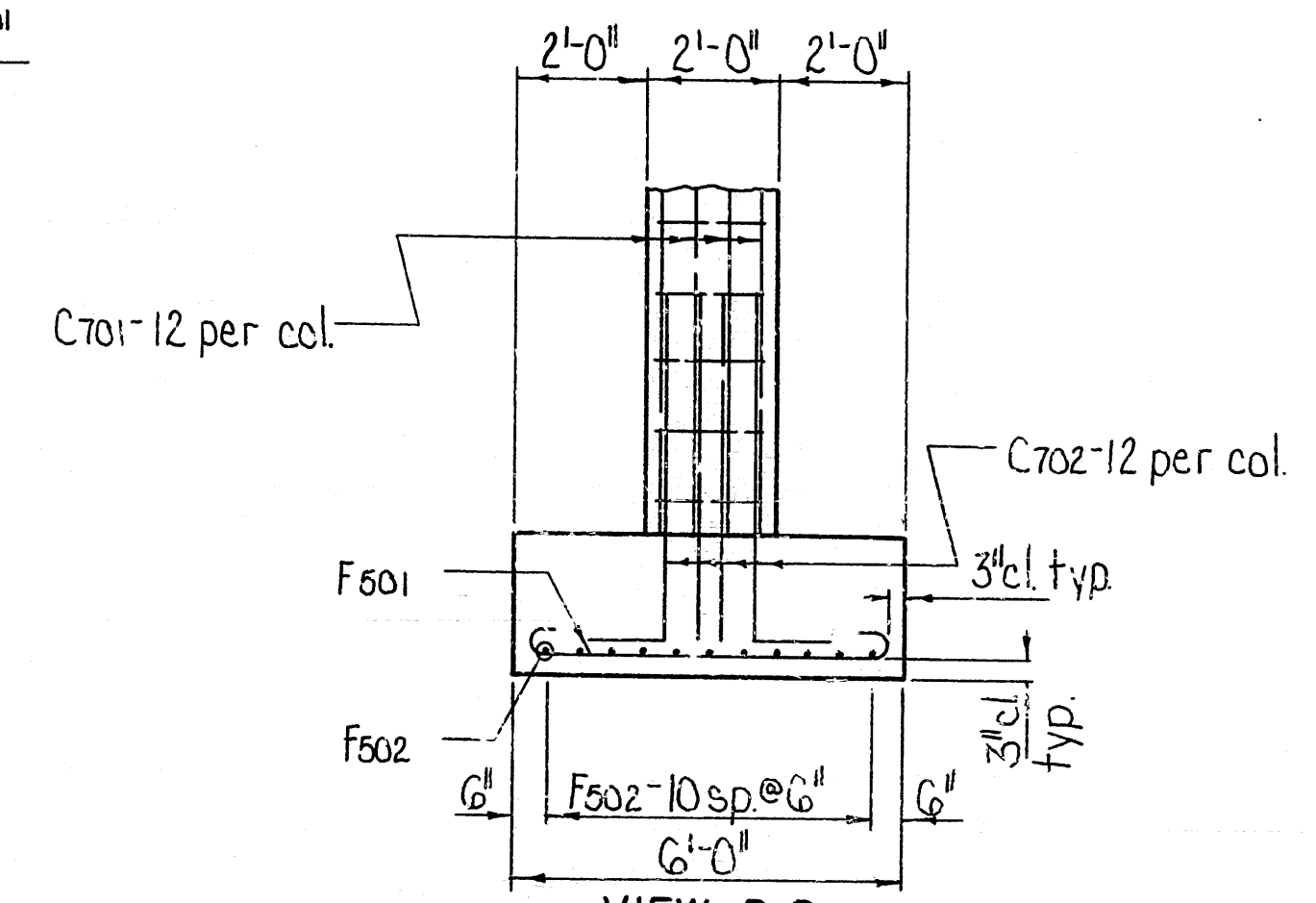
**ELEVATION**  
Looking Ahead  
Scale: 3/8"=1'-0"



**SECTION A-A**  
Scale: 3/4"=1'-0"



**TYP. SECTION THRU COLUMN**  
Scale: 3/4"=1'-0"



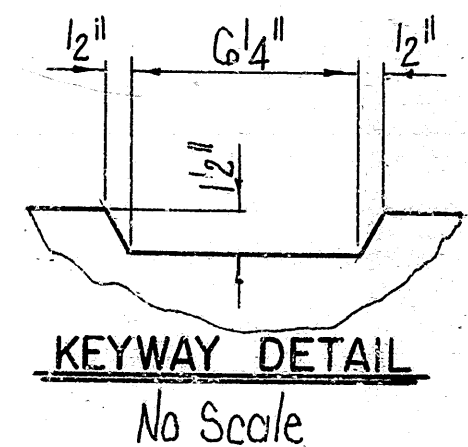
**VIEW B-B**  
Scale: 3/8"=1'-0"

**BAR LIST-PER BENT**

MARK	NO. REQ'D	LENGTH	PIN DIA.	BENDING DIAGRAMS
B401	4	29'-8"	Str.	
B402	4	35'-8"	Str.	
B403	84	9'-6"	2"	
B601	8	29'-10"	Str.	
B701	8	29'-8"	Str.	
B702	8	37'-9"	Str.	
C401	52	7'-2"	2"	
C701	48	12'-7"	Str.	
C702	48	6'-2"	5/4"	
D401	*	2'-6"	Str.	
F501	36	6'-8"	3/4"	
F502	44	5'-8"	3/4"	

Dimensions are out to out of bars.

\* 40 for Bt.2, 40 for Bt.3



**GENERAL NOTES**

ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH,  $f'_c = 3500$  PSI.

REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A617, GRADE 60 (YIELD STRENGTH,  $f_y = 60,000$  PSI).

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 WITH INTERIMS.

LIVE LOAD: HS20-44

METHOD OF DESIGN: LOAD FACTOR

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

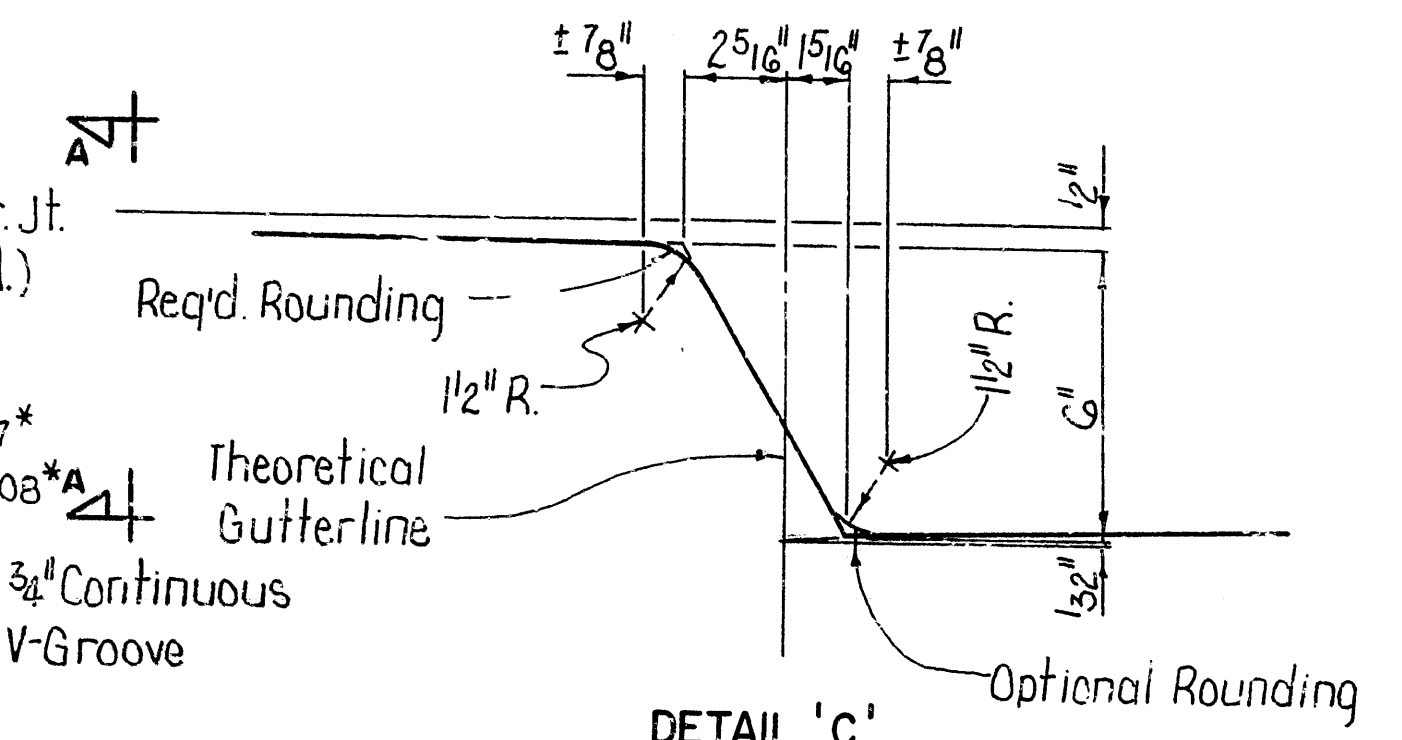
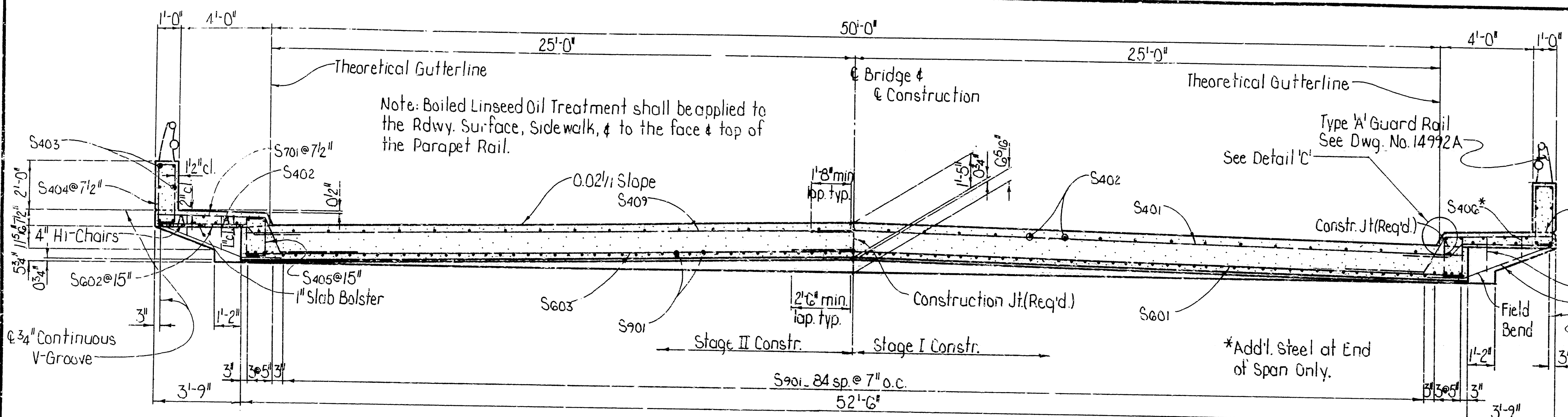
DETAILS OF INT. BENTS 2&3  
BRIDGE OVER NORTH CHANNEL  
TAYLOR LOOP CREEK  
PULASKI COUNTY  
ROUTE 10 SEC. 8  
**ARKANSAS STATE HIGHWAY COMMISSION**  
LITTLE ROCK, ARK.  
DRAWN BY: KDH DATE: 9 NOV 82  
CHECKED BY: JLB DATE: Dec 82  
DESIGNED BY: CES DATE: Nov 82  
SCALE: AS NOTED  
BRIDGE NO. 5996 DRAWING NO. 25630



DATE	REVISED	DATE	REVISED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
							18	53

JOB NO. 60161

5996 - SLAB DETAILS-25631

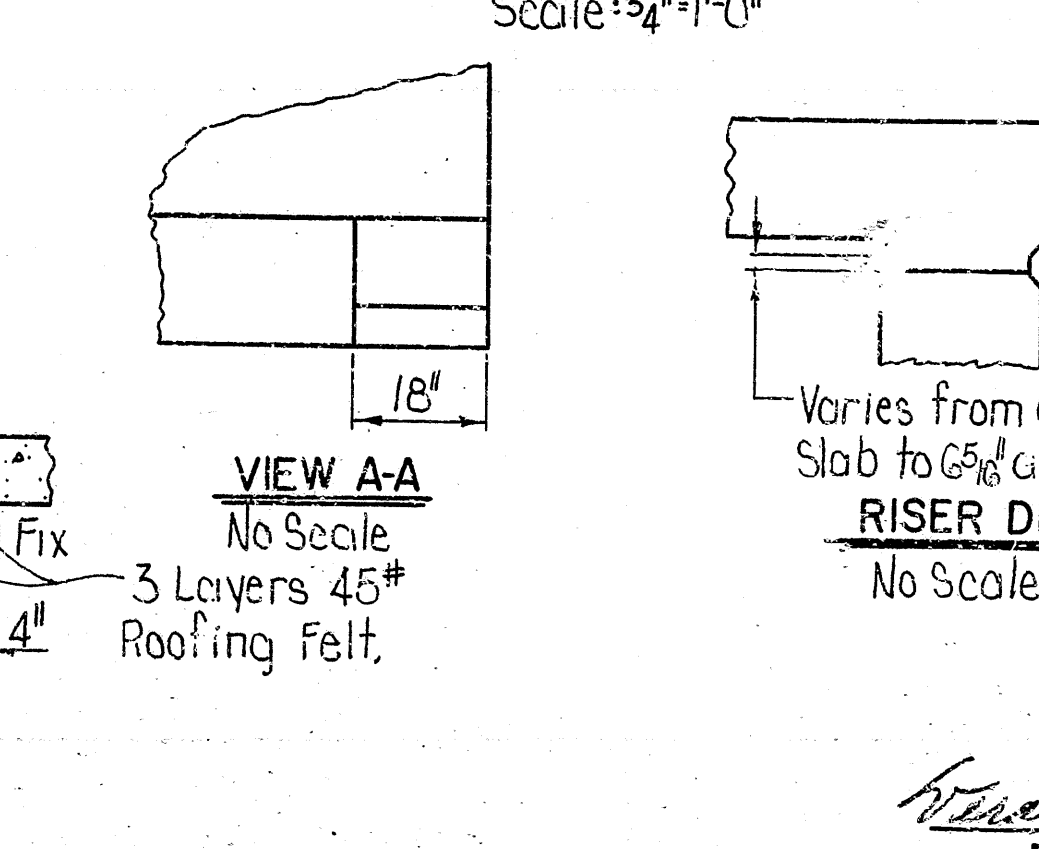
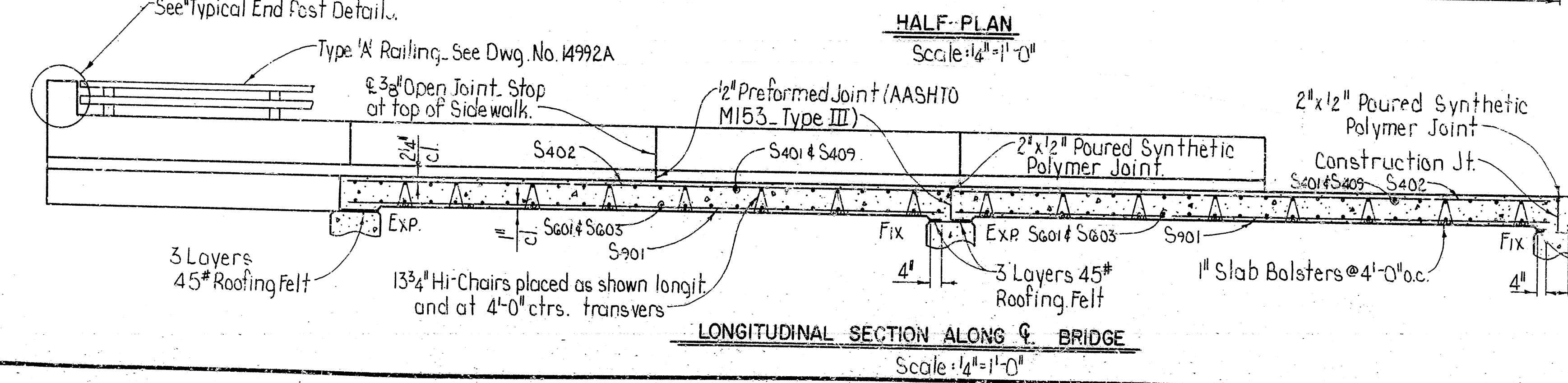
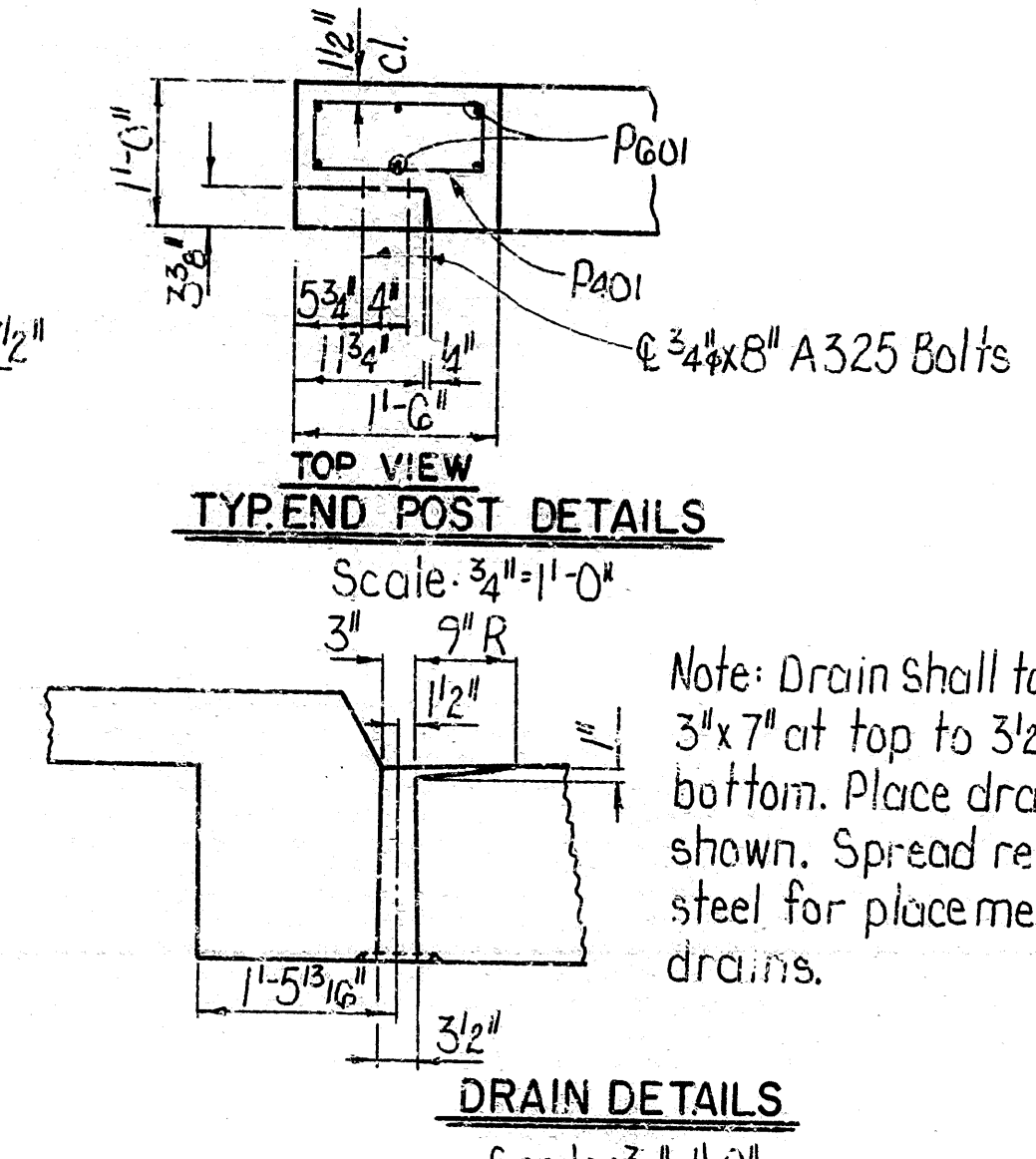
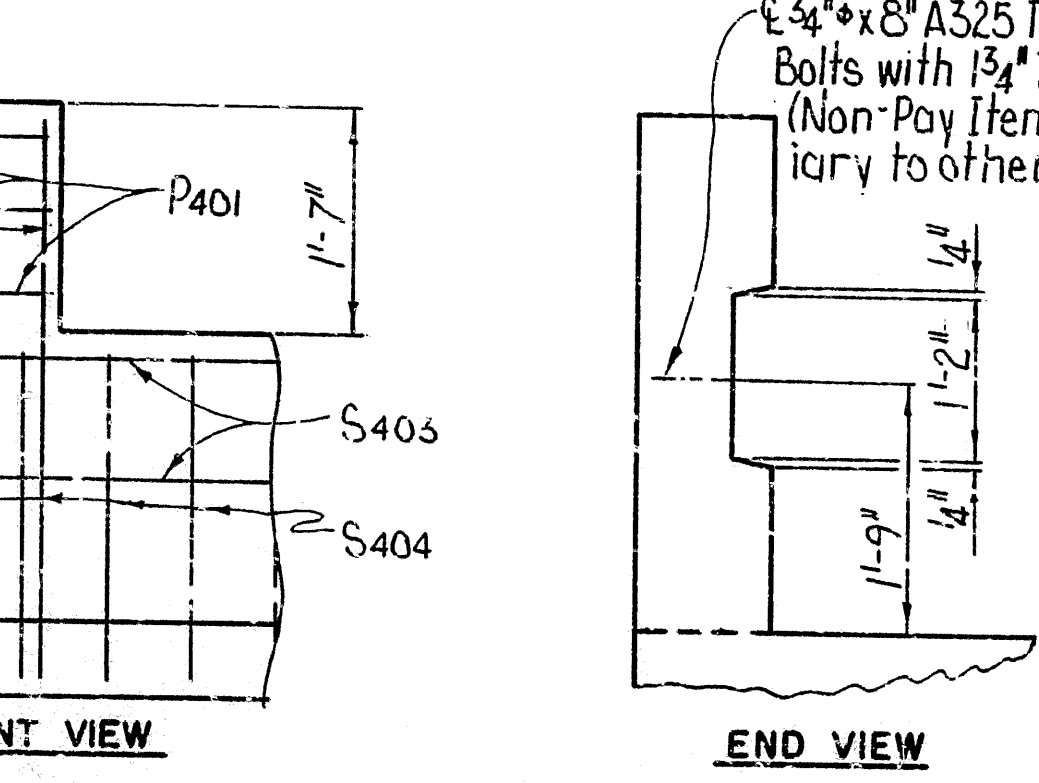
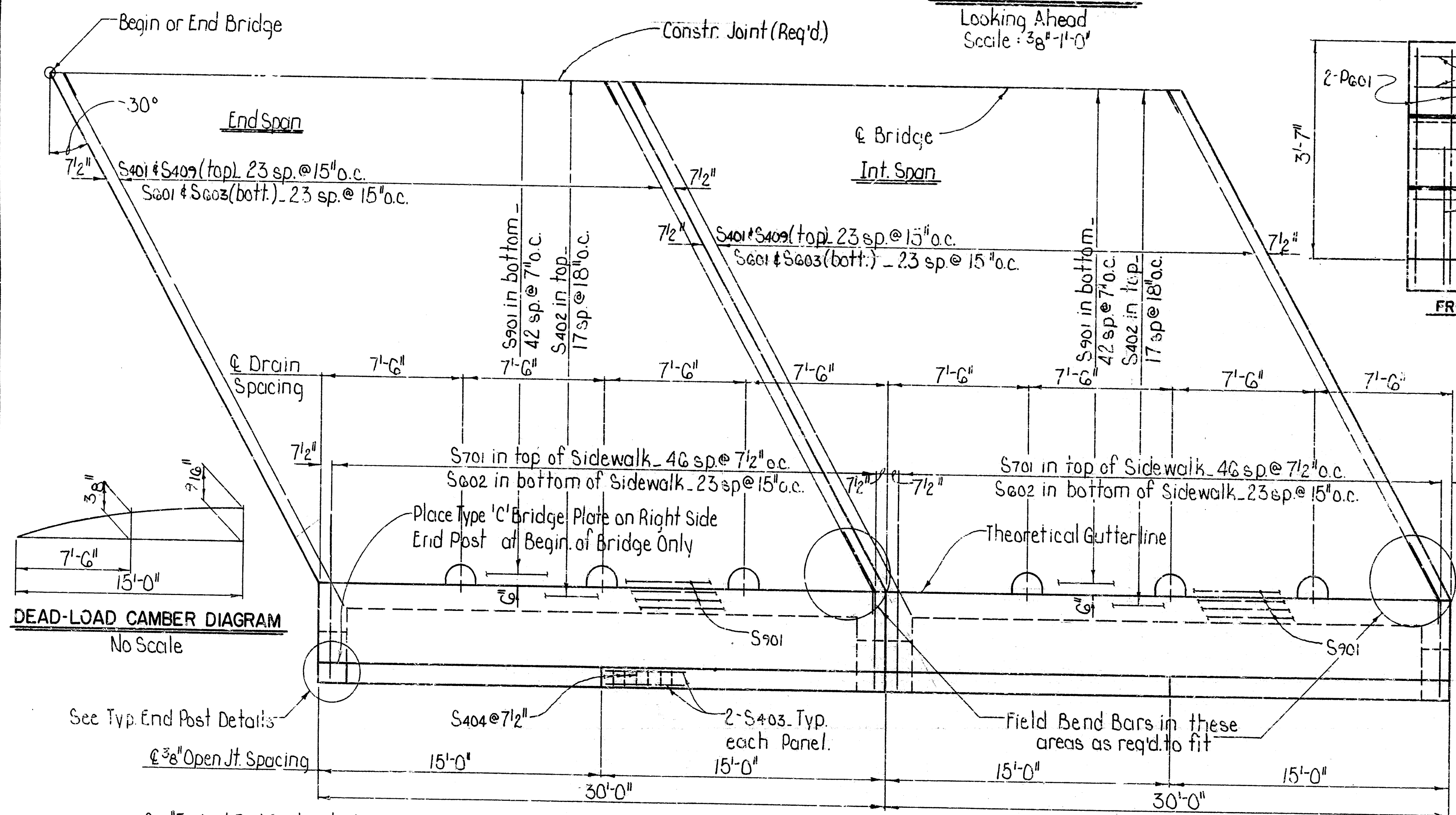


**BAR LIST - PER SPAN**  
Scale: 3/4"=1'-0"

MARK	NO.	REQ'D	LENGTH	PIN DIA.	BENDING DIAGRAMS
S401	24	31'-10"	Str.		
S402	55	29'-3"	Str.		
S403	16	14'-8"	Str.		
S404	96	7'-1"	2"		
S405	48	6'-2"	2"		
S406	4	5'-0"	2"		
S407	4	6'-0"	2"		
S408	8	5'-5"	Str.		
S409	24	30'-0"	Str.		
S601	24	32'-8"	Str.		
S602	48	6'-0"	3/4"		
S603	24	30'-0"	Str.		
S701	94	10'-1"	5/4"		
S901	93	29'-8"	Str.		
P401	6	3'-10"	2"		
P601	12	3'-11"	Str.		

\*\* End Spans Only.

Dimensions are out to out of bars.



**GENERAL NOTES:**

ALL CONCRETE TO BE CLASS (S)AE. EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 OR A617 GRADE 60. BAR SUPPORTS FOR REINFORCING BARS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL."

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, STRUCTURAL STEEL, AND POURED SYNTHETIC POLYMER JOINTS SHALL BE MEASURED AND PAID FOR AS CLASS (S)AE CONCRETE.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1977 WITH CURRENT INTERIMS.

DESIGN LIVE LOADING: HS20

LOAD DISTRIBUTION TO SLAB: DEAD LOAD \*265 PSF; LIVE LOAD -0.174 WHEELS/FT. OF WIDTH PLUS 30% IMPACT.

UNIT STRESSES: COMPRESSIVE STRENGTH OF CLASS (S)AE CONCRETE = 3500 PSI  
YIELD STRENGTH OF REINFORCEMENT = 60,000 PSI

LOAD FACTOR USED FOR DESIGN OF SLAB.

\*INCLUDES 24 PSF FUTURE WEARING SURFACE.

**DETAILS OF 30'-0" R.C. SLAB SPANS**  
BRIDGE OVER NORTH CHANNEL  
TAYLOR LOOP CREEK  
PULASKI COUNTY  
ROUTE 10 SEC. 8  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: KDH DATE: 15 SEPT 82  
CHECKED BY: KMG DATE: 1-24-83 SCALE: AS NOTED  
DESIGNED BY: JMS DATE: -

BRIDGE NO. 5996 DRAWING NO. 25631